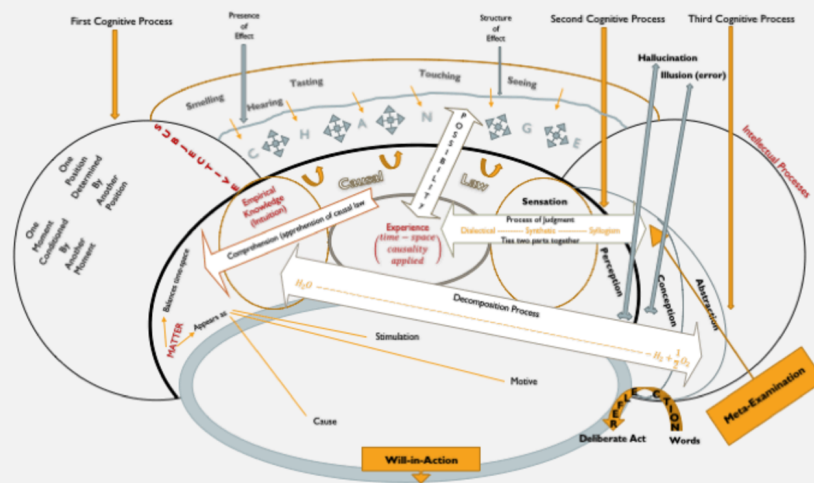


**MORE THAN 100 YEARS LATER:
A SCHOPENHAUERIAN REVISION OF BREUER'S ANNA O.
ARIAN PERSÄE**



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PREFACE

I first learned about both Arthur Schopenhauer and Josef Breuer through unforgettable hours that I spent on Sigmund Freud's writings. Now, I bring forth a paper all Schopenhauerian with examples based mainly on Breuer's observations. (For the sources from the first two thinkers, I have mainly consulted their German versions. Like two magnets touching their same sides, the English translations have sometimes diverted significantly from their German versions.)

For any hints to physics, no matter how small, I owe them to Albert Einstein.

Like a convex mirror, I have briefed and converged some of my understanding of Schopenhauer's writings here, on which I shall base any future works. For an eternal dedication to Schopenhauer, I take my role as his κλητὸς υἱός.

Consulting the sources, especially Breuer's work on Anna O. (in *Studies on Hysteria*), is recommended to the reader, whom I can only advise to read Schopenhauer from his own works, not from the reports of others. My use of Breuer's work is not disturbed by present-day psychoanalysts, whose intention not insight is their guiding star. While their psychoanalysis is to serve them in private, I dedicate this work (or any future writings) to the public. To the reader, patience as their only trustee, is recommended to have it at their disposal whenever they read through the lines of this work.

Brookline, Massachusetts
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§1

Interaction begets existence: – this is a truth that applies to everything. Existence, then, is not *transcendental*. It only asserts that every being is in *relation* to another one. A careful observation of a toddler, for instance, shows that the toddler's interaction with environment is the foundation on which its knowledge is built and it eventually comes to the understanding that something *is*, or *exists*. We think of people as to their relationship with us, and then their relations to each other. Or, we look at our houses and cars in regard to their purpose and how they satisfy it.

Things-in-relation consideration [Betrachtung] is according to what I call the *principle of Metron*. Metron is the universal method of any consideration, and the most general form of all representations or phenomena. Metron, however, applies to the knowableness of representations, not to them in-themselves¹. I shortly document and explain this thesis by facts that belong more to human inner life, than systematic psychology and the gone-astray psychoanalysis.

On the contrary, what this paper does not cover is the world that stands parallel and opposite to intellect. The sphere of this world is so vast that it contains almost everything, even diverse and antagonistic terms. This world is the world of *feelings*. To briefly illustrate it, I shall give you an example that I experienced in a school of psychoanalysis.

¹Metron is the cusp of the time-space union that makes multiplicity possible. I cannot follow this thesis further here; it will be briefly discussed in §6. For the time being it is necessary to mention this consideration that Metron, time-space and multiplicity are forms of knowledge (not of Quelle) and thus only in this sense they are discussed in this paper.

One day, in a class (on Theories of Psychoanalysis), as I began to introduce the fact that people's perceptions of one object, when carefully studied and contrasted, could be as different as their finger prints, professor of the course, showing no patience², suddenly raised the notion that my recollections of length, size, shapes, and distance were "feelings."

To show him that evidence does not support his pseudo-usage of the term "feeling," I gave a few examples (e.g., reports from people who were operated and cured after being born blind). When he was unable to answer them, students came to rescue him.³ The followings are a few acknowledgments that they admitted while they were trying to define "feeling" as they see it: for some students, sensations (e.g., of touching, tasting, etc.) were clear examples of it; and others admitted that they still "have the feeling of touching the moon,"⁴ and were astonished that why one did not.

It is amusing to see how the entire class is turned back and forth to call any ideas come to their mind "feelings." They surely have *ideas made of feelings*. Nonetheless, we can conclude a few notes from this example. Firstly, no one in the class gave instances of ordinary daily *feelings*. It seems as if they forgot that "The lady speaks again in Welsh; I understand thy kisses, and thou mine; And that's a *feeling* disputation" (Henry IV, III.i. 198-199). Another noticeable point was the confession of "touching the moon." Calling it under the name "feeling," a minimum of four graduate students testified that

²Due to the present-day psychoanalytic teaching on "listening," analysts have misapprehended Freud's note on the subject – that is, not interrupting one's train of thought – with a sort of "stay-quiet-and-say-nothing" method. Developing pseudo-method of listening, psychoanalysts' mask drops as soon as they "feel" they are not in therapy rooms, and their old habit of interrupting someone at once comes to surface. As I briefly noted, in the preface, to gain personal profit, for some psychoanalysts "material interests and personal aims" have taken possession of true analysis, "in order to make it their tool or their *mask*."

³See below on *abstract motives*.

⁴See below on the impossibility of removing perceptual (as *structural*) errors.

they still had “the feeling of touching the moon.” The confession is an index as to how a) childhood perceptual errors, in some individuals, may remain active throughout their adulthood, and b) perceptions easily cloud over by means of the concept “feeling.”

The opaque characteristics of concepts covered by the word “feeling” can easily become a main source for misunderstanding and controversy, which it did occur at the end of the aforesaid classroom case.⁵

§2

There exists no *viewpoint* [Betrachtung], if nothing serves as a *starting-point*. For example, we cannot measure a quantity (i.e., that which is capable of changes) if we do not have another quantity of the same kind as unit of measurement, with which we can show their mutual *relation* (e.g., in form of proportion or ratio of two numbers).

In fact, even the starting-point (be it the organism itself or a phenomenon of the external world), as it was briefly mentioned in §1, must *interact* with something else. One part that regulates an interaction is *intellect*, for which the *body* of the organism is its first *immediate* object. Intellect represents sense-perceptions of members of the body by means of the sense-impressions. It also represents other sense-perceptions from the organism’s environment. The latter representations, however, are *indirect*, because of the intermediary role of the organism’s body. The entire (immediate and indirect) knowledge, thus provided, swings between two poles: consciousness and unconsciousness – these poles operate as reciprocal conditions of each other, and their exposition will be given through the subsequent considerations.

⁵These “professors” should be ashamed of themselves, sitting in Freud’s chair, and using tainted and nonsense words to ruin any Freudian finds in their way. For example, while in a school of psychoanalysis they issue licenses in that regard, they urge their students to apply “behavior therapy” (whose license require whole other training and teachings) to patients, just because patients “want to see something.” I have enclosed (in Appendix A) an email of a “professor,” sent to me, right after he heard that I discontinued the (sham) program. I shall leave its analysis to the reader.

First and foremost, I take the fact that physical bodies can act upon each other, and thus changes appear. The *ability to act* implies that some objects may *receive* the impression of a body acting on them, while some may not. So, here, I explain cases, whose sense-impressions are moderately healthy. In other words, the senses of a subject of study successfully pass the medical test.

To give an example, consider Anna O., Joseph Breuer's patient in late nineteenth century⁶. As we study her case, we find that except one occasion, when in early December 1880, an ophthalmic surgeon diagnoses Anna's convergent squint as a paralysis of one of the abducens nerves, no other disorder in her sensory organs is reported. (In fact, Breuer entirely dismissed the opinion of the ophthalmologist.) Furthermore, Anna's "left-sided occipital headache," which is basically a sensory derangement, not disorder, is only mentioned once; and her anesthesia of the right upper and lower extremity is ultimately treated by Breuer. And, finally we hear that, for her facial neuralgia, she was discharged from her post-Breuer admission to hospital in 1882.⁷

It is not the aim of this paper to discuss about cases that show sensory disorders. So, Anna's example exhibits a promising case for the purposes of this paper. I often use my own remarks of her case, with the acknowledgment of places where they coincide with Breuer's meticulous observations. To start with, I take the phenomenon of sensation into consideration.

Common sense seems to agree that *sensations*, as organic functions, are transferred to the brain through sensory organs (with their complex nature). As organic functions, sensations

⁶Breuer, J. & S. Freud. *Studies on Hysteria* (trans. J. Strachey). Basic Books: Harper Collins Publishers. NY (2000).

⁷Ellenberger HF. The story of 'Anna O.': a critical review with new data. *History of Behavioral Sciences* 1972; 8: 267–295.

are natural signs that have the power to affect our attention. Impressions on the sensory organs correspond to sensations, and as the former vary, the latter change. The interactions of a toddler with its environment that I mentioned before are all related to the *immediate* data that it receives during its early days by means of immediate consciousness of changes of its body, given by sense impressions.

Sensations not passing the threshold of pain do not attract our attention and our intellect immediately carries to whatever they signify. If a sensation is constantly repeated or it *excites* a sensory organ, it may not be directed outward. In that case, the sensation can be felt as agreeable or disagreeable (or even be pathogenic). We observe this phenomenon when a bunch of flowers (even though they were seen one flower at a time) excited Anna and gave “her much pleasure.” Or, she would recognize “someone whom she was ordinarily pleased to see” even for a short time before sinking “back into her own broodings.” Furthermore, an intense emotion or passion, getting in the way of sensations, convulses the individual. For instance, even though she knew it was silly and “had no idea what was the matter,” Anna “was angry with” Breuer.

Ultimately, what is at stake here is that sensations as the first series in human cognitive life are within the domain of what I call *First Cognitive Process* (or FCP).

First Cognitive Process

receiving and periodically transferring sensory data.

Animals, affected by sensory data, begin to form a knowledge. The formation, however, should not be taken as though the sense impressions have produced it.

Furthermore, according to what has been said, *knowledge* is a characteristic of animal life, and sensation, as an organic function, is the first window to it. Since sensation is highly determined by the sensory organ, and because the organs of senses are not the same, it is important – taken major senses into consideration – to distinguish between senses (i.e., smelling, tasting, and hearing) that provide us with the *presence* of what is sensed, and senses (i.e., touching and seeing) that give us the *structure* of that which is sensed. Presence and structure of what is sensed constitute the *outer sense*.

It is for the *periodic* nature of the functionality of FCP that we have *time*, and for the sake of physiology of senses we have *space*.⁸ If the periodic function and the anatomic physiology of the FCP are intact, we obtain the union of *time-space*.⁹ One instance, in which the union is disturbed, is when the brain's function is changed, as in dream.¹⁰ In dream, things are not in time and space and thus are not *objects*. They are better called *dreamlets*, as distinct from *objects*. In dream, a moment is not necessarily conditioned by another moment and a position is not necessarily determined by another position. Since by means of time self-consciousness becomes possible, that is why we see our *self* acting in dream, while we are resting in bed. So, we should also distinguish between the spooky operation of consciousness in dream and the self-consciousness when we are awoken. Forgetfulness that occurs when we wake up from a dream and live again in the single dimension of time proves the dimensionless nature of the dream, due to functional changes of the brain in that state.

Consequently, FCP partly allows us to say, *it is* or *it exists*; that is to say, it provides us with an *outer* sense. And it partly collects all different data inward and provides us with an *inner* sense. (The collection of) sensations remain subjective or unconscious and

⁸Time, space and causality are functions of our brain, as it receives sensory data.

⁹Molecular clock and its role in mood regulation should be studied alongside the *time-space* exposition.

¹⁰I owe the affirmation of this observation to a very honest friend.

involuntary. As Plato puts it, the knowledge merely based on these sensations are opinions based on sensation.

§3

The FCP does not go beyond what it deals with, so we should not attribute intelligence to it. On the other hand, FCP is not clearly separated from the next cognitive operation, out of which intellect, *per se*, emerges. I call the next cognitive operation, the *Second Cognitive Process* (or SCP). At this point, and before giving a detailed exposition of SCP, it is necessary, by some incidental explanations, to remove obscurities that may arise as the consequence of overlapping the function of FCP's transference with SCP's operation.

I start with the example of Anna's transfer to a country house, during (and after) mid 1881. During this time, Breuer was unable to visit her daily. To make the matter worse, at one point Breuer went to a holiday trip, and these abruptions in the treatment caused Anna's condition especially her moral state to get worse. We see that the whole scenario changes when Anna is moved back to Vienna and continues her regular "talking cure" with Breuer. What makes Anna's condition to swing like a pendulum, from one side to the other, is the action of "talking cure." This action consists of *one-by-one recollection* or *narration* of the elements of talking. One-by-one recollection makes the narrated verbal utterances to be in time, which is the form of the *inner sense* that makes Anna's *immediate* knowledge of herself possible.

Moreover, we are told that shortly before the narrations, Breuer observes "every one of the spontaneous products of her imagination ... persisted as psychical stimulus." Conventional wisdom has it, and through self-observation one can see for oneself, that imagination (and dreams) produce *immediate* presence of an object in consciousness. The word *immediate*,

nevertheless, implies that such presence is transitory and isolated.

We are thus left with this conclusion that, on the one hand, the foundation of all knowledge lies in the immediate knowledge of objects, which are given apodictically. On the other hand, the knowledge provided in this way is dull, meaningless, and can be perceived as pain or pleasure. For instance, whereas love is seen in later life of a child, it basically grows out of the immediate *instinctive* attraction that the child has perceived as pleasures in its early life of development.

At this point, i.e., at the overlap of FCP with SCP, sensation does not separate itself from that which is constructed by SCP. At this overlapping region, the delicate nerve-extremities pulses go through a transformation, i.e., “the subjective sensation transforms into objective perception,” the result of which will be called a *representation*.

Second Cognitive Process

transition from effect to cause, and conversely

SCP has a twofold function; it partly conceives the sensation as an *effect* and unconsciously¹¹ by means of a law tries to arrive at its *cause*; and partly, it simultaneously through the given component of space removes the cause beyond (outside) the individual. For instance, one who has lost a limb feels pain at times; while the pain is produced by a nerve in the brain, it is attributed to “outside,” to the lost limb.

It is necessary to clear the point that *cause* and *effect* are not simultaneous. They constitute *changes* or succession of events, which are continuous and divisible *ad infinitum*, and so

¹¹While in seeing, transition from effect to cause is mainly unconscious, in other senses, “we investigate the causes of each effect we experience.”

is the entire business of the causal law¹². Thus, SCP becomes the source and the pure spring of all knowledge. Accordingly, there exist no “first cause,” simply because there is no beginning of time¹³, nor a limit of space¹⁴.

We find in philosophy and science individuals who ignore this (unconscious) function of their brain – that is, SCP’s double function – and take the object as something that exists in-itself “outside” (the consciousness of) the observer. *Cogito, ergo sum* [I think, therefore, I am], for instance, assumes that immediate knowledge fits only the self-consciousness, or the observer; *Cogito, ergo est* [I think, therefore, it is], on the other hand, fitly stands on the opposite pole, for it takes certain relations of objects (in consciousness) as that which, with high possibility, participate in experience, or the observed. The fundamental error, and the absurd opinion, of all time is to say that *an observed ... exists without an observer; or conversely!* Such an approach is “like the painting of a sorrow, a face without a heart” (Hamlet, IV, 7: 107-108a). The observer and the observed are the double helix structure of existence, and consequently, they are *relative*.

Strictly speaking, experience is conditioned by the concept of cause. To appeal to Breuer for an example, we find that “the first provoking cause was habitually a fright of some kind, experienced while she was nursing her father.” Unable to find the (outside) cause, Breuer accordingly continues, “many of these incidents consisted of purely inner experiences and so could not be verified.” In short, patient’s experience comes only after the representation of the cause has been constructed, and during the therapy, these causal connections should be searched. SCP’s *transition*, that is to say, the first intellectual phase is the subjective correlative of the causal law.

¹²This law should always be employed with the content of SCP and never be generalized to a “concept” which is the subject of next consideration §4.

¹³There is only an *enchanging* of time, which I describe it fully in future writings.

¹⁴Einstein has already described the finite but unbounded space. See A. Einstein, “Ideas and Opinions” (trans. Sonja Bargmann); Wings Books, NY:1954, pp.232-246.

Experience has a regulatory role. It determines the changes of sensation. Breuer has noticed this role where he writes, “a number of extremely obstinate whims were similarly removed after she had described the experience [erlebnis] which had given rise to them.” The part that experience plays in learning (and therapy) is only partial, it resembles the stomach in helping to digest the food. Experience only helps the SCP to apply its function. Experience, thus, does not remove Anna’s “whims,” even though, in a sense, it generated them. For instance, we find that in autumn 1881, when Anna “returned to Vienna her condition was bearable, both physically and mentally,” however, “very few of her experiences – in fact only her more striking ones – were made into psychical stimuli in a pathological manner.”

FCP’s sensations should be distinguished from the products of the intellectual operation of SCP, that is, from *representations*. Transition from effect to cause, i.e., causal *relation*, is the first sign of intelligence; the whole SCP is thus intellectual. Intellect, as a vehicle, carries the cause, which in human acts under the mask of motive¹⁵. Exhibiting different degrees of sharpness, and innumerable gradations, SCP has one universal form in animals’ intellectual life: the *immediate* knowledge of causality, that is, transition from effect to cause and from cause to effect. Common examples of the *transition* (whether they are correct or incorrect) can be frequently seen in science, e.g., from the ancient interpretation of falling an object as its “desire” to go back to its origin, to Hooke’s law and Einstein’s theory of relativity, all are the result of the function of SCP¹⁶, exhibiting often different degrees of gradation.

Observation supports that SCP also exhibits degrees of *sharpness*. For instance, when Anna could apply her SCP, she was “naughty” and “used to throw the cushions at people” or

¹⁵I shall soon describe motives.

¹⁶See below for the *instant* function of SCP, i.e., *insight*.

“tore buttons off her bed clothes and linen.” A familiar example of this sort of craftiness is called *cunning*, through which one tries to outwit others.

Regarding my consideration up to here, the following remark should be restated. While we are unaware of the transference of FCP apart from SCP’s transition, the operation of SCP is at once and happens unconsciously. To give an example, we see that while no problem is reported with Anna’s hearing, she displays paraphasia, by which her SCP cannot perform the transition from German to German words and although she hears the words in German, unconsciously “she spoke only in English - apparently, however, without knowing that she was doing so.”

The union of time-space, mentioned earlier, will not occur if SCP malfunctions. For instance, Anna, having composed herself temporarily, “would soon sink back into her own broodings.” On the other hand, when SCP functions normally, despite the ceaseless flow of time, the perceived object remains *permanent*. A state, when Anna lived in it, “she recognized her surroundings; she was melancholy and anxious, but relatively normal.”

An important part of Anna’s pathological symptoms – such as, convergent squint, disturbance of vision, paralyses, paresis of muscles, occipital headache, diplopia, macrospia, amblyopia, anesthesia – should be traced back to the malfunction of SCP. To this list, I shall also add her *hallucinations*.

As I mentioned, the main function of SCP is the *transition* from effect to cause, i.e., the application of the causal law. The transition and the causal law should not be simply taken as conditional (if-then) relation. Anderson’s ACT (Adaptive Control of Thought) theory¹⁷ could be a potential candidate of this kind. There, he has indicated the conditional phrase *if-then*, and how in human a set of if-then(s) (or variables) is at work, until when the necessary conditions are present and thus action occurs. He

¹⁷R. J. Anderson, *The architecture of cognition*.” Harvard University Press, Cambridge, MA (1983).

additionally elaborates that in a production system, that is, when sets of condition-action pairs are active, the role of working memory escalates, letting the production system *directly* result in action. In a similar manner, Endel Tulving,¹⁸ in his General Abstract Processing System (GAPS) presents the episodic memory, which additionally has *temporal* organization, as being active during decision making that ends to action¹⁹.

Anderson's and Tulving's postulates, though often taken for granted, do not add up to answer one important question, that is, how (if-then) *relations* are initially constructed. The answer to this question should be searched in SCP's basic function (i.e., *transition*), which defines how SCP constructs (perceptual) *relations*. For example, in the summer of 1880, Anna "threw a quoit into some bushes; and when she went to pick it out," SCP's transition at once and unconsciously (though unhealthily) operated and "a bent branch revived her hallucination of the snake, and simultaneously her right arm became rigidly extended."

What is interesting, in the above example, is that instead of the relation branch-branch or trunk-branch, the relation branch-snake or trunk-snake was represented. Here, the term "revived" [German: Rief, from the verb Rufen: summon] implies a remembrance of a past object or event, or in the case of Anna, a hallucination. In other words, a malfunction in connecting parts of the bush is at stake, that is, a failure in the *transition* from branch to branch (or to trunk).

In his 1921 book, *Intelligenzprüfungen an Menschenaffen*, W. Köhler considers the role of the *relation* (in SCP) in a methodical study on chimpanzees. After his impressive experiment with apes, he wrote that they learned to make a longer tool by inserting one stick into an opening in another and thus to reach a fruit at a distance. Introducing the term *einsicht* [insight] (by Köhler) to their mental processes seems to be appropriate,

¹⁸E. Tulving, *Elements of episodic memory*, Oxford University Press, Oxford London (1983).

¹⁹See below for an exposition of *decision making*.

because it means *seeing of relations*. The apes can make a larger tool, because they “see” the *relation* between parts of the tool, the distance, and the goal (fruit). If, for any reason, the *relation* cannot be made, the solution of the problem becomes very difficult (often impossible). Köhler himself had observed that “when the two sticks accidentally crossed in chimpanzees’ hands, forming an X, they had been unable to perform the familiar much practiced operation of lengthening the tool²⁰.”

The operation of SCP, as we saw it earlier, may work improperly and “summon” a hallucination in place of a perceived object. It may sometimes (e.g., due to paralysis of the brain’s parts) dispose a person of providing anything to his or her consciousness. At this phase, the *transference* of FCP will bind one’s attention and the *transition* of SCP becomes obstructed, i.e., one will be fixed at the effect instead of a quick changeover to the cause. In addition to an earlier example from Anna, we can add her occasional complains of a profound darkness in her head, of not being able to think, or of becoming blind and deaf. In fact, we find 12 reports of her being deaf “during deep absence.” On the other hand, the counterpart of a complete deprivation, i.e., an excess, of SCP’s function (due to FCP’s excessive operation), can also occur. For example, Breuer noted that Anna’s blurred vision or diplopia was “markedly increased by excitement.”

Furthermore, SCP can be intact while it fails to *apply* its function to the sensations. Such application is acquired by practice and exercise. An example of this application can be found in new-born children, who exercise SCP’s function to sensory data, especially during the first few weeks of their life.

The result of a transference of FCP, without SCP’s operation of transition, is pain and suffering. For example, when Anna, with neutralized SCP, was set in motion from within, going

²⁰For further study see chapter 4 of *Thought and Language* by L. Vygotsky (ed. By Alex Kozulin) MIT Press: Cambridge, MA (1988).

through “a period of persisting somnambulism” (like a spider spinning its web) “would then wake up and complain that something was tormenting her – or rather, she would keep repeating in the impersonal form ‘tormenting, tormenting’.”

Before introducing the next consideration, I present a few more observations by Breuer. For instance, in Anna’s earlier stages of treatment (during December 1880), Breuer hoped “that the permanent burdening of her mind with fresh stimuli could be prevented by her giving regular verbal expression [or, saying in detail] to them.” But, we later read that Breuer was disappointed [enttäuscht] with the result, and I shall shortly show that the materials of language are of *secondary* value and thus are *indirect*.

Another important consideration is that the medium of language is the sense of hearing. Hearing sensations, because of their paths in the brain, can oscillate the entire brain and disturb its functionality. (I am of the opinion that our brain receives sensations as *wave functions*²¹, because otherwise their effect or impression cannot reside in any part of the brain within a given time interval.) The English term “sensible” is rightly made for those with high power of SCP’s function (of transition).

Breuer himself observed this point in Anna’s condition and realized that this sense was of the most concern. “It regularly occurred that the patient did not hear when she was spoken to.” Breuer then adds, “It was possible to differentiate this passing habit of not hearing as follows:

- a) Not hearing when someone came in, while her thoughts were abstracted. 108 separate detailed instances of this, mentioning the persons and circumstances, often with dates. First instance: not hearing her father come in.
- b) Not understanding when several people were talking. 27 instances. First instance: her father, once more, and an

²¹By the same token, all operations of the brain (producing representations and conceptions) consist of wave function. See, Thomas Reid, Vol. I: chaps. 2 and 3.

acquaintance.

- c) Not hearing when she was alone and directly addressed. 50 instances. Origin: her father having vainly asked her for some wine.
- d) Deafness brought on by being shaken (in a carriage, etc.). 15 instances. Origin: having been shaken angrily by her brother when he caught her one night listening at the sick room door.
- e) Deafness brought on by fright at a noise. 37 instances. Origin: a choking fit of her father's, caused by swallowing the wrong way.
- f) Deafness during deep *absence*. 12 instances.
- g) Deafness brought on by listening hard for a long time, so that when she was spoken to she failed to hear. 54 instances."

§4

So far, I have considered the representations within their topological makeup, i.e., the double FCP–SCP knowledge of animal life. I mentioned that this knowledge is valid only for *particular* cases, limited to one object (as representation) at a time. To communicate this knowledge and plan activities, there is an ability (mainly in humans²²), an entirely new consciousness, which can abstractly – like a mirror – *reflect* those representations. The reflection should not be taken as mathematical congruency of two representations. As a matter of fact, reflected representations, i.e., abstract concepts, never correspond exactly to the representations of SCP. As I showed earlier, in Anna's case, she was speaking English (i.e., abstract concepts) without having any understanding (i.e., representations) of it. The abstract concepts resemble a mosaic of Mona Lisa in contrast to the fine painting of it (resembling SCP's representations).

²²This fact should not be taken as a *law*. For instance, we hear of the recollection of a past event in elephants which it had lasted for half a century.

The in-congruency (i.e., the paradox between an abstract concept and the object(s) it reflects) can be the cause of *laughter* in every one of us. For instance, as Breuer tried to get Anna to read a French text in English, she began laughing and said, “That’s like an examination²³.” When a comedian pretends lacking SCP’s function of transition, and acts always under the influence of abstract concepts (hence it is called pedantry), his acts becomes a subject of laughter for us, because his expression and words have taken the place of real matter and objects. Laughter, nonetheless, specially in adults, whose faculty of abstraction is fully developed, should not be taken as a therapeutic valve or “filter.” For, as Shakespeare says, “One may smile, and smile, and [yet] remain a villain” (Hamlet, I: v. 108).

Furthermore, *reflection*, as an abstract operation, extends human concept of *time* to past and future,²⁴ and enables one with *abstract concepts* that identify him or her independent of the *present* time. Abstract concepts provide us with certainty and preciseness, and enables us to communicate a lump-sum of information within a short period of time.²⁵

I call this²⁶ different and complicated cognitive process Third Cognitive Process (TCP). Examples of the TCP are numerous, but its construct bifurcates into two realms: one merely *abstract* ideas, and the other as perceptual *concepts*. To take a few examples (of TCP) into consideration, we may take humans’ deliberate plans, actions based on principles not

²³The term “examination” proves the theory that *wit* (as well as *folly*) can be the cause of laughter. Also, since the request was from Breuer (from without) and unintentional, here, we can refer to the cause of laughter as going from the discrepancy of concept to the identity of object; the converse can also be a cause for laughter.

²⁴The reader is advised to continue further and read §5 to compare the concept of extended time with time as in time-space union.

²⁵See Appendix B for an example of cognitive processes and their internal relations, as Metron is discussed shortly.

²⁶The obscure meaning of “this” will be cleared bit by bit, due to complexity of the concept.

because of the impression of the moment, preparations for death, weighing of motives and choosing one, communications of thoughts via words not sounds and gestures, and so on. On the other hand, the common point of *abstract concepts*²⁷ is their *generality*, i.e., not being determined by one *particular* representation of SCP. Generality, thus, gives them the characteristic of having spherical extension, to which Euler should be credited as the inventor of showing *metrons* by means of circles – that is, the relations of concepts (and representations) to each other²⁸, with the aid of perceptual figures.

The first production of TCP is language, whose contents are words (signs); it represents general concepts, not specific individual representations produced through the operation of SCP. It thus can be concluded that *metron*²⁹ of a concept is another concept, not representation. For instance, there is no one image of dog in general, color in general, and so on. We can only evoke the image of some dog or color (as representations) in specific, when we mean dog or color (as concepts) in general. According to the principle of *Metron*, both abstract ideas and concepts have ultimately representations of SCP as their ground.

The function of TCP provides us with a *double* intellect: the perceptive and intuitive SCP, and the abstract and conceptual TCP. Directly applying the therapy through the latter did not seem to be working in Anna's treatment, for which Breuer says,

²⁷To avoid confusion of using such close words, i.e., *abstract* and *concept*, I refer the reader to the diagram presented at the beginning of the paper. It is very natural that the reader, facing considerations of this paper, in one hand, and their own opinions, on the other, demand (new) words with more clarity. Inventing new words, or borrowing from other languages could cause losing their relations to the concepts under consideration and this fact obliged me to use the old expressions. The present endeavor will be justified if we take into consideration the old age structure of some concepts within the scaffolding that has been made in regard to a very hard subject.

²⁸See below, on *judgment*, which is defined as the ability to combine concepts.

²⁹See §6, for a brief explanation of the principle of *Metron*.

“It turned out to be quite impracticable to shorten the work by trying to elicit in her memory straight away the first provoking cause of her symptoms.” The reason for this paradox in human intellect is that while SCP perceives a representation, TCP can think of something completely different. A fact that I call it human’s mental camouflage.

In therapy, thus, one may distinguish between merely abstract words, i.e., the products of the TCP, and the genuine representations of SCP. But how one is to access the representations of SCP, whereas the only possible entrance is through TCP? Breuer has initiated the answer to this question, “by

1. Owing to her being over-strained and distraught by ‘talking out’ [Aussprache] ..., and
2. Owing, too, to the reminiscences needing time before they could attain sufficient vividness [Lebhaftigkeit].”

I discuss about *motives* and *decision making*, (which could have found their place here), in later considerations, where I mention the immediate role of TCP in human life. Here, I continue the previous paragraph in more extensive way to show a part of the TCP, whose direct access to SCP is under consideration.

TCP has two gates to SCP. From one gate, it enters SCP’s representations, and isolates or decomposes them into concepts – it is like breaking the bonds of H_2O into H_2 and $\frac{1}{2}O_2$. Through the other gate, Breuer using “talking out” passed, spent some time, and finally accessed SCP’s representations with “sufficient vividness.” These representations (mainly the latter ones) act as *Metron* for concepts and are fixed with words, to which a therapist should pay attention – in short, SCP is the primary source of all evidence, whose (direct or indirect) *metrons* provide us with truth. Let us see how Breuer developed the method. “We evolved the following procedure.

- a) I used to visit her in the morning and hypnotize her. (Very simple methods of doing this were arrived at empirically.)
- b) I would next ask her to concentrate her thoughts [Gedanken] on the symptom we were treating at the moment and to tell me the occasions on which it had appeared.
- c) The patient would proceed to describe in rapid succession and under brief headings the external events concerned; and these
- d) I would jot down. During her subsequent evening hypnosis
- e) She would then, with the help of my notes, tell me a *fairly detailed account*³⁰ of these events.”

As I mentioned earlier, because of decomposing function of TCP, it would be “impracticable” to retrieve the first evoking representation that had caused Anna’s symptoms, simply by means of the word(s) with which the “provoking cause” had been fixed. Although at one end the *decomposition process* of TCP cuts and drops valuable intuitions and representations, at the other end (by means of the law of homogeneity) the results, i.e., the *comprehensions* [begriff: comprehensive thought] are brought into its realm, in form of *abstract concepts*, which thereafter they are fixed with words. Accordingly, one concept may form a *complex* [inbegriff: comprehensive totality].

Abstract concepts are time-free, and depending on the reduction of representations, during the process, they may be empty and merely abstract with less connection to experience or perception. That is why an abstract concept, in Anna’s case, shows “quite impracticable ... to elicit” the cause of the SCP’s deviation from its normal operation. Besides, our entire consciousness is soaked in *time* and admitting time-free concepts by means of dry (and empty) words to consciousness can only add confusion to the already rigid life of mere abstraction.

³⁰The italics is by me. A fairly detailed account or Ausführlich implies that her report was *comprehensive*.

In general, the products of the TCP are *general* and time-free, so they are not in consciousness. To retrieve them in consciousness, they are *fixed* with signs and words and thus they can be presented to consciousness. Moreover, we may remember at times when we could not think of a word (especially moving from one language to another) while a concept is running through in our train of thought. The latter phenomenon, nevertheless, occurs quite rarely, and one way to overcome it is by learning languages.³¹ On this occasion another point may be added that the common expression “words hurt” is a proof that consciousness has an *animalistic* nature, that is to say, its sensuous pleasure and pain come to work as soon as it is activated.

Concepts may or may not have other concepts in common; a fact behind many unsolved disputes among people. It explains why “the verbal utterance of her hallucinations calmed her” while the communicated words (concepts) did not have any thing in common (i.e., they were not *related*) with the provoking cause of Anna’s symptoms and thus could “not induce sleep.” And it also portrays why Breuer needed as many stories as possible when he says, “evening after evening [I] made her tell me three to five stories.” And, “My words fly up, my thoughts remain below; Words without thoughts never to heavens go” (Hamlet III: iii. 97-98).

It is possible that TCP functions properly (e.g., one speaks and comprehends) whereas SCP shows deficiency. I call this state of mind, SCP’s *disorder* (the common culture calls people, showing this disorder, “stupid”), a state in which the application of causal law appears dim and dull. Such a person has deficiency in apprehending the connection of natural phenomena. The deficiency prepares the road to beliefs in magic and miracles,

³¹To see how monotonous one language can be when it is compared with another, I give the example of *love* in English language. When we apply this word to different concepts, the Greek language uses different words to introduce different concepts. For instance, the word *στοργή* is used for *parental* love, *φίλι* for *friendship* or love between friend, *αγάπη* for universal *humanistic* love, and *ερος* for *romantic* love.

and such a person is prone to what may be called *mythomania*. But for all that deficiency, I marvel the most at the sagacious SCP of my friend's little dog puddle, whose expressions of SCP proves how far SCP can go without the aid of TCP.

Furthermore, a TCP working only through the decomposition process (and the law of homogeneity), cannot assist SCP's functionality and its errors and hallucinations. In other words, an abstract idea is like a wanderer who has lost its (perceptive) signs and clues during its conceptual journey. This abstracted nature of concepts describes why it is hard to remove hallucinations and errors of SCP from human mind, by the aid of TCP. On the other hand, following the principle of economy, abstracting function of TCP is vital to our mental life. It gives us the power to summarize the multitude of our intuitions into a few concepts and fix them with words. Here, the role of the language is essential in reducing the intuitive representation to abstract conception, keeping in mind that TCP, in itself, does not contain innate concepts.

Any aggravation of the function of concept-making may cause a patient's horrifying hallucination to come to surface. For example, Breuer reports that "It was not, however, until the deterioration of her mental condition ... that her evening reports [referate] ceased to have the character of more or less freely-created poetical compositions and changed into a string of frightful and terrifying hallucinations."

As we saw earlier, the complex function of TCP is not limited to decomposition/conception. It can by itself (or by the assistance of the therapist, as Breuer discovered with the use of "talking out") reflect upon the content or experiences of SCP (with "sufficient vividness"), infer and accordingly act deliberately. I call this function of TCP *meta-examination*.

Meta-examination is that which is commonly called *thinking*. But, meta-examination has broader connotations. It employs reflecting and deliberating. For instance, we find that

in March 1881, Breuer “guessed” [erraten] that Anna’s resistance [Hemmung: inhibition by force] to talk was based on the fact that “she had felt very much offended over something.” Consequently, Breuer, as a therapist, “obliged³² [zwang: applied a mental force, meta-examination by force, guessed and enforced by therapist] her to talk about it.” As a result – of meta-examination by the aid of therapist – “the inhibition [Hemmung], which had made any other kind of utterance impossible as well, disappeared. This change coincided with a return of the power of movement to the extremities of the left side of her body.” And her “paraphasia receded.” Shortly later, Breuer writes that “only some months later” he “managed to pursue her [gelingen: it conveys enforcing a will] that she was talking English” for which Anna “had disputes with her nurse.”

“Only some months later” implies that meta-examination is time-consuming and exhausting; or as Anna herself says, “she knew that after she had given utterance to her hallucinations she would lose all her obstinacy and what she described as her ‘energy’.” Besides, “talking cure,” which is a part of meta-examination, is *one-by-one recollection* or *only-in-time narration* of the elements of talking. Since, narration is in time, recollections appear only by means of the *inner sense*, whose form is *time* alone. (Meta-examination method, generally, in psychology should be credited to Breuer, who arrived at it in both Anna’s hypnosis and her conscious verbal utterances to hysterical phenomena.)

As *decomposition/concept-making* were the two ends of one procedure of TCP, in its other procedure we find *meta-examination/judgment* acting at two ends of the second procedure. During the function of meta-examination, judgment by means of the law of specification can arrive at an experience which is the ground of a concept (not of a judgement). The most common problem at this stage is error.

³²Elsewhere Breuer uses the terms “Drängen” and “Bitten;” that is, he “urged” and “entreat” Anna to talk about the inhibiting force.

(To describe the anatomy of *errors* in cognitive processes, I first remind the reader to space-time continuum and the law of causality and how they reign behind (all possible) multiplicity of the external world.) Errors can occur either during the operation of SCP (i.e., when one wrongly applies the causal law), or during the operation of TCP (i.e., limitation of the knowledge of the *possible*). The common denominator of both errors is the occurrence of a mistake in the “kingdom of the possible.”³³ There are two adverbs that either one may appear wherever an error is occurred: “always” and “therefore.” The former takes the possibility to extreme, and the latter falsely attributes a possible relation.

After all, if judgment arrives at a wrong experience an error in judgment, or the *error of TCP*, occurs. This error is a *procedural* error and thus it can be obviated and corrected or be prevented. Hallucinations (and other errors) of SCP, on the other hand, are *structural* errors and their correction is hard, and they can hardly be removed. For instance, due to cultural learning, I have learned to pronounce the letter *s* palatal and not dental. As a result, when a word begins with two consonants (the first letter being *s*, such as Spain) and right at the moment of pronouncing it, the letter *e* comes before *s*, and changes it to dental (thus Spain changes to Espain). To correct this error, which is an error of SCP, I have been able to consciously hardly accomplish it, but not unconsciously. The nature of both errors of SCP and TCP is the same: they follow the principle of Metron. So, to diagnose an error, the search should be focused on discovering a *relation* – whether it is a perceptual relation or a conceptual one.

Common wisdom calls the judgment working through meta-examination and the law of specification, *analytic* judgment (e.g., *cogito, ergo sum*). If judgment combines experience-related concepts, then it is called *synthetic* judgment

³³The Greek word ἐξέστιν means *possible* and the same root is applied for ἐξουσία which refers to inward kingly power.

(e.g., *cogito, ergo est*). In other words, the *Metron* for judgment can go from general to particular, or conversely, from particular cases to general ones. The grounds of both types of judgment are concepts not experience nor representations.

Both procedures of TCP, i.e., the total TCP, develop through conversation. For instance, when she was under therapy, Anna developed an understanding of the therapy and invented the term “talking cure.” Because, conversation involves a subject that is left for future papers, I only add this consideration that during a conversation (between one of high intellect and one of lower one) the road to envy may get paved. For, Shakespeare has rightly pictured one “who has gained of education all the grace, which makes her both the heart and place, ...But alack! That monster envy, oft the wrack of earned praise” (Pricles iv: 8-13).

§5

After the exposition of the consideration of TCP, as a special process mainly peculiar to humans, it is still upon me to fulfill the promise on TCP’s relation to human action, and to their decision-making process; that is, on how TCP influences action. It goes without saying that because of the possession of TCP – that is to say, the presence of abstract concepts in consciousness – human behavior differs from that of non-human animals³⁴. The main difference between human and non-human animals should be searched, in what I call *temporal* abstract memory, i.e., the capacity of a notable consciousness of past and of a possible future both connected to the present, which, as such, makes a *coherent* thinking possible.³⁵

TCP provides humans with a *double* life. A life that, in one part, one lives on a *theater stage*, and, on the other part, one attends as *audience*. “Of iron, verily is thy heart” (Iliad II: 24: 521) is an expression on how TCP has mastered SCP.

³⁴SCP in non-human animals departs from their similarities with our consciousness once their instincts enters into their consciousness.

³⁵See below, where it describes patients, in whom, during absences, the past cannot be recollected uniformly coherent.

The disproportionality between reality, represented by SCP, and our expectations can also result in our pain and distress. “For there is nothing either good or bad, but thinking makes it so” (Hamlet II: 2); or, “Oft expectation fails, and most oft there; Where most it promises, and oft it hits; Where hope is coldest and despair most fits” (All’s Well That Ends Well II: i. 142-144).

TCP provides us with the power of elective decision. In other words, human action is through *motivation*. It means that plan, purpose and reflection, i.e., elective decision, takes the place of *impulsive* action. Going through (double) intellect, motivation becomes intellectual. That is, in every voluntary act motive is in action. Because intellect can act in motives without the need of FCP’s meddling, motivation is independent of time; that is why, a particular motive acting on a particular action does not come to consciousness.

To take a case in point, I start with a 2004 article, published in German magazine, the Spiegel³⁶. Beginning with the unconscious origin of human decisions, G. Roth, a neurobiologist, says that a step-by-step process of decision making is now comprehensible. Subsequently, Roth comments: “First, genes have extensively decided one’s emotions; then the influence of early childhood has formed future pattern of decisions, and closely the experience of other years of someone’s life.”

He, furthermore, testifies that he has calculated the number of working neurons, in the brain, at about 14 billion, connected with one trillion synapses. Based on his estimation of neurons, he believes that in this *network of neurons and synapses*³⁷ one comes to a decision. He supports his find by referring to neurosurgeons who would stimulate patients’ brain cells to produce actions, while patients amazingly would think that they had “intentionally” decided to perform the action.

³⁶Der Spiegel, Das Hirn Trickst das ich aus, 52 (2004) pp. 116–120.

³⁷See below §6 on *metron theory*, for a similar consideration.

Roth's work tells us a great deal about the quantitative structure of human neurobiological activities in decision making, it is not clear, however, whether his conclusion applies to qualitative processes of those activities. Any random observation confirms that people manipulate (especially negative) events. So, how this manipulation can be described as an unconscious act.

To answer this question, I first invoke Anderson's, and specially, Tulving's theories. As these theorists show, the working and the episodic memories are active during condition-action and decision-making, respectively. Further observation on their theories reveals that they have built their theories upon J. S. Mill's account.³⁸ Mill first introduced the idea that for people to decide, it is enough when only its sufficient conditions are present (even if necessary conditions are absent). In 1982, Daniel Kahneman, *et al.*³⁹ designed an experiment to test Mill's logical law of induction on decision making. Using what they called "cab problem"⁴⁰ they could show how the estimation of necessary condition (i.e., hit-and-run cab) for a blue cab decreased while the mere blue color was sufficient for the cab to be the errant one.⁴¹

The upshot of all this is that people, using mental tools, manipulate (especially negative) events. Wittgenstein (1953 and 1969)⁴² has further speculated it and acknowledged that, toward these events, people act with certainty, without necessarily having a logical ground or reason [zeichenregel]. When they want to justify their actions, they act like a mirror

³⁸J. S. Mill. *A system of logic*. Parker, Son & Bourn: London 1843.

³⁹D. Kahneman, P. Slovic, & A. Tversky. *Judgment under uncertainty: Heuristic and Biases*. Cambridge University Press: London 1982.

⁴⁰Ibid, pp. 156–158.

⁴¹My personal computation of the researches' statistical analysis showed that the analysis (on the application of the Bayesian rule) needed revisions. The revised computation, however, was not significant to contradict their find.

⁴²L. Wittgenstein. *Philosophical Investigations*. Basil Blackwell: Oxford, UK 1953. And, L. Wittgenstein, *On Certainty*. Basil Blackwell: Oxford UK 1969.

image [ebenbild] and use the language as if they were experimentally playing with it (which he calls *language-games*). They do not try to “explain” their actions; they simply *practice* them. Decision, for Wittgenstein, is not a direct action at a distance, but it arises from a web connection [*feld*] of words. By establishing a *field-theory*,⁴³ he consequently abolishes the linear notion of absolute simultaneity of intention-action.

One example of language-game that works as a mental tool to manipulate (negative) events is daydreaming, which delights one’s solitude. For instance, “while everyone thought she was attending,” we observe that Anna “was living through fairy tales in her imagination.” Her constant activity of imagination, on the other hand, “led to a habit of day-dreaming (her ‘private theatre’), which laid the foundations for a dissociation of her mental personality.” And consequently, we find that anxiety and dread in Anna “transformed the patient’s habitual day-dreaming into a hallucinatory *absence*.” As in Anna’s case, daydreaming (to which I add, keeping journals) may impair SCP’s proper functionality.

In addition to “absence,” the “fear of remembrance,” in Anna, “would inhibit [hemmt]” the appearance of any recollections. One reason for this form of inhibition is a high intelligence that can repress the memory. Besides, Anna’s hesitance [Unschlüssigkeit] in remembering (e.g., her reflected face in the mirror and her skull) pulled her memory with almost equal forces in opposite directions. That is, a conflict of motives appeared in her memory, which brought the memory into a standstill, resulting to the command that something should be *inhibited*.

The pathology of inhibition resembles interpreting the sculpture of Laokoön, whose voice stuck in his throat, right at the moment the snake was about to bite him. The bite and its

⁴³For an expanded view on the subject, I refer the reader to §6 on *metron theory*.

consequent pain are farfetched to retrieve a psychological illness. It is its threat of happening, a *remembrance*, that created the *absence of crying out*, captured by the sculptor.

On a closer examination, however, it becomes clear that the cause of the *inhibition* (i.e., being in the *state of Laokoön* or of zero gravity) is not memory per se, but the cause lies in *external objects*, having been connected with memory; they thus forcefully draw the memory in different directions. This real cause works only through memory, which is the medium of motives. The high intelligence (that I just mentioned) comes into play at this stage and works on representations (of the objects), and their manifold relations (or, Wittgenstein's web connection [*feld*], and Roth's network of neurons and synapses). A miniature of such inhibition can be seen in our daily affairs, in our inability to decide.

The inability worsens as the transition in the function of SCP weakens (or one is born with weak SCP) and it does not allow one to find the manifold relations of objects – the inability resembles a chess player who cannot predict several moves in advance. We can see this weakening in people who show major care in their (moral) life. They, like Anna, have a fragile egoism, are always alert, and want to “be good” or “stay safe,” which, consequently, it leads to anxiety and thus to inhibition.⁴⁴

The external object and anxiety are two spaces that intersect at a line where motives are in conflict. For instance, Anna “began coughing for the first time when once, as she was sitting at her father's bedside, she heard the sound of dance music coming from a neighboring house,” which caused a conscious conflict of motives and she “felt a sudden wish to be there,” but through deliberation or elective decision “she was overcome with self-reproaches. Thereafter, throughout the whole length of her illness she reacted to any markedly rhythmical music with a *tussis nervosa*.”

⁴⁴The role of inhibition in our species and its survival, and the correlation between breathing and inhibition shall be set aside for future papers.

In short, decision, in one side, by means of external objects, empirically enters into the functionality of SCP, and from the other side, it proceeds internally with conflicting motives (which can be exposed to the analyst by means of clues collected from the analysis of TCP's "talking out" [Aussprache]). And because the conflict acts through memory, the role of the patient and/or analyst is to make the manifold relations of the objects, which were left unexamined, comprehensible.

Memory should not be considered as a storehouse. It enables words and images to be exercised. Anytime we recall something, a new *packet* is presented. Furthermore, memory is a two-force axial system. From one side, it is influenced by the content of a subject (e.g., "how many printed pages have been read") and from the other side by its energy (e.g., "how many times the read pages have been exercised"). If for any reason one side is pulled more than the other, the consequence is what is called "mental breakdown." For instance, we find that "Anna devoted her whole energy to nursing her father," such that through her constant (mental) work, "no one was much surprised when by degrees her own health greatly deteriorated."

To put it differently, when the force exerted on the (thread of) memory passes a threshold, it breaks the thread, and memory's continuous connection becomes obliterated. For example, Anna's "most severe psychical trauma" struck [treffen] her when "her adored father died." And if I wanted to summarize her entire illness, I would say that the relations (i.e., *metrons*⁴⁵) in Anna's cognitive processes got broken. That is why, "upon the gap [absences]," Breuer reports, "in her train of conscious representations,

⁴⁵See §6.

- She used then to stop in the middle of a sentence, repeat her last words and after a short pause go on talking.
- These interruptions gradually increased till they reached the dimensions that have just been described; and during the climax of the illness, when the contractures had extended to the left side of her body,
- It was only for a short time during the day that she was to any degree normal.
- But the disturbances invaded even her moments of relatively clear consciousness.”

Thereafter, fictions start filling the gaps. For instance, “during her *absences*” Anna “was obviously *creating*⁴⁶ some situation or episode to which she gave a clue with a few muttered words.” “The stories were always sad and some of them very charming, in the style of Hans Andersen’s *Picture-book without Pictures*, and, indeed, they were probably constructed on that model.” “But she also built up her stories on quite other topics.” “The stories naturally became still more tragic after her father’s death.”

In this phase of absences, the past cannot be recollected uniformly coherent, and the present takes the shape of an imaginary past. All (even present) is related to the past and that which is absent. We see, for example, Anna exhibited a “transfer into the past”, in which “this re-living [*wiederdurchleben*] of the previous year continued.” The memory that is most active in this phase is SCP’s memory, which has a *recurring* nature; that is, every present experience revives the traces of past events. Thus, a memory refreshes earlier sensations and their associated moods and emotions. Like, for instance, my friend’s poor puddle dog, who used to yowl, sometimes up to two hours, upon my departure from their house. Memories of SCP can enter into a phantasy, which thus they help the trace of an absent object hover over in mind.⁴⁷

As a consequence of absences, the following observations are noticeable in people living in that state of mind:

⁴⁶The italics is by me.

⁴⁷Patient’s dreams are mainly based on these phantasies.

- i. They show extreme actions, for which only extreme exists. Anna's mood changes, for example, led to "stubborn opposition to every therapeutic effort." "Her moods [Stimmungen] always tended to a slight exaggeration, alike of cheerfulness and gloom; hence she was sometimes subject to moods."
- ii. What exist, for them, are ideas not things. In other words, things represent the whole species. For instance, "frightening hallucinations of black snakes, which was how she saw her hair, ribbons and similar things." "The pathogenic and exciting effect brought about by the ideational complexes which were produced during her *absences*, or *condition seconde*."
- iii. Always their interest is involved and thus they narrate too objectively. We thus see that the events Anna "described, in her interest [ihrer Interesse] but insignificance [Bedeutungslosigkeit], were told in such precision that there could be no suspicion of their having been invented." And they were in her memory "so clearly differentiated."

Earlier, I mentioned that distress and anxiety can result from individual's egoism. The distress and anxiety, nevertheless, are the root and fundamental tone of one's mood that protect them from a "strange and hostile" environment (and people).

Moreover, the subject of one's sympathy (toward the world) is in fact his or her own (egoistic) self. As, for instance, we find one of Anna's "essential character traits was sympathetic kindness. Even during her illness, she herself was greatly assisted by being able to look after a number of poor, sick people, for she was thus able to satisfy a powerful instinct."

However paradoxical one's behavior may look, far more reality is to be attributed to them. Because on the one hand such a person has not acquired a proper way to react to the "strange and hostile" world, and on the other, his or her handling [Verarbeitung: workmanship or working-over] of the world is egoistic, with pathological results. After all, between us and the environment, there stands our *thought*; it resembles the حجاب of a Muslim woman which is to make her inaccessible to unwanted men.

The major cognitive part that acts behind this paradoxical mask, is TCP, the total TCP. While being so important in human life, providing them with *abstract motives*, TCP has its own disadvantages and drawbacks. To the earlier classroom example (of students blindly followed their professors), I now add the fact that if we can strongly pursue a few people that, for instance, the sun is not the cause of daylight, we may hope to see it soon as a public opinion.

Moreover, it is for the reason of abstract motives that today fanatic Muslims, with full inner conviction, sacrifice themselves to words (e.g., the holy war). And, it is for enjoying these motives that we pay for it with mental illness, and the pleasure with pain.⁴⁸

Abstract motives exist in a sort of *collective* consciousness. They are not deduced from one's experiences, but are *transmitted* to him by means of tradition⁴⁹. These motives have instant power of transmission and one may be at risk of carrying the errors they transmit. Inoculated thoughts, carrying abstract motives, wrongly seem to be inherited, but it is true that they are hard to be removed. To give a few examples of the influence of these abstract motives in our lives, I appeal to Shakespeare, where he says, "Nor sleep, nor sanctuary; Being naked, sick, nor fane, nor Capitol; The prayers of priests nor times of sacrifice; Embarquements all of fury, shall I lift up; Their rotten privilege and custom 'gainst; My hate to Martius. Where I find him, were it; At home upon my brother's guard, even there; Against the hospitable canon, would I; Wash my fierce hand in's heart" (Coriolanus 1.x: 17b – 27a). "Why, thou picture of what thou seemest, and idol of idiot-worshippers" (Troilus and Cressida V.i.6-7a). "To say, within thine own deep-sunken eyes; Were an all-eating shame and thriftless praise" (Sonnets 2: 7 – 8). And,

⁴⁸The only true remedy is to go back to the old unconsciousness, which is a subject for my future writing. A snapshot of this future consideration can be found in §6, under the name *ergon*.

⁴⁹The term *tradition* in Greek language is παραδοση, which means *that which has been handed down*,

“Thou dost stone my heart; And mak’st me call what I intend to do; A murder, which I thought a sacrifice” (Othello V. ii 63b – 65).

§6

The course of my considerations has made it necessary to hypothesize a theory on (the Principle of) *Metron* and conjoin its remarks here, for the first time and in an entirely different light. *Metron*, in this paper, was first integrated into object and its *related* part, the knower, (this is the *Metron* of Being). Then, I introduced time-space and causality as the subordinate forms of the object; they are the prior conditions to all experiences. These forms are *a priori* – that is, they are prior condition of all representations and experiences – (this is the *Metron* of Change). *Metron*, in short, is one common expression for the Fourfold Root of the Principle of Sufficient Reason. *Metron* also units the outward side of the world (which has been the focal point of this paper) to the inward side of it (this is the *Metron* of Action). The method of investigation, however, is not the same. *Interaction* was used to examine the outward world. The inward side of the world, the *Q* [quelle], will demand a different method and procedure, with which the light of the principle of *Metron* (of Action⁵⁰) gets dimmer as we attempt to approach it. However, it is the conditional concept of *necessity* – i.e., when a ground is given, the consequent necessarily comes thereafter – that helps us to shed some light on it.

Since *Metron* is the principle of all *explanations* – i.e., the proofs of relations – it has meaning only in relation to explanation; *Metron* consequently is inexplicable. *Metron*, though, has different *gestalts*, which by means of space-time continuum and causality appear in consciousness – that is, when a particular set of representations appears according to *Metron*.

The inexplicable *metron* should not be taken as *Q*. The medium of *Q* is *ergon*. *Metron* is a *language*, by which *Ergon* is translated into the objective world. One example of *ergon* is

⁵⁰This topic will be explored in future writings.

libido.⁵¹ Libido does not assume any forms of knowledge (it is not a representation; thus, it is not in time and space, and the causal law does not apply to it). Libido is (one of) “the most adequate objectivity of *will* or *thing-in-itself* [Quelle].”

Representations, abstract concepts, and motivations (such as, changes in human moods, struggle for existence, adaptations, etc.), to which the Principle of Metron applies, are objectifications of *one* libido.

A representation in itself, like a coordinate system, is relative, for it presupposes an observer and an observed. When we study a particular individual representation of a specific general *ergon*, we should take into consideration both time (which is the form by which self-consciousness becomes possible, as *ergon* emerges and spreads out) and the *causal law* (i.e., the bridge between sensations and perceptions).

Topologically, I take the position that there must be an organ, out of whose affections, certain representations proceed. As an example, we can take the reproductive system (here I consider it in a range from fungi to plants and animals). Reproductive system, whose *ergon* is some particular *species*, is interesting because it reveals itself *openly* in plants and gradually takes a *hidden* position as we move toward humans, in whom, by means of TCP, it hides under psychological masks, with a sense of guilt.

Total sum of representations in an animal’s stages of development, according to the functionality of SCP and thus Metron, proceed from one *ergon* – the given consideration, with some modifications, can be generalized to other beings and natural entities. It’s not that, for instance, the Earth escapes away from the sun or it is pulled toward it, it is that the sum-total of these opposing forces is the product of *one* thing.

The total sum and *ergon*, however, are reciprocally related. Whether one gets A or C, in an exam, may not be as important

⁵¹Gravity is another example of *ergon*. The Metron for gravity is space-occupation; that is to say, as soon as space is occupied, there exists gravitation.

as whether one has cheated or taken it honestly. The annihilation of individuals is immaterial; species shall continue.

The function of every *ergon* is toward a goal.⁵² The common error that “everything has a reason – i.e., it happens for a reason”⁵³ – finds meaning and truth only in this end-oriented *ergon*. It is to be noted that *ergon* does not act or function, but an act or function at a time, in a place and under some circumstances can only be explained by the principle of Metron, which simply translates the expression of an *ergon*. What Plato has called Idea is nothing but Ergon, whose phenomenon is that which is called representation.

Fulfilment and appeasement are nothing but illusions. Endless striving is the characteristic of representations. The Greek word for perfection (τέλος) means also *end* – i.e., perfection does not belong to this world (of the phenomena). So, perfection and fulfilment of a function belong to the province of the *ergon*.

Knowledge, Metron’s seasonal fruit, remains at the *service of ergon*; because Ergon does not belong to the domain of Metron (but quite the converse). According to the principle of Metron, knowledge is independent of the path it takes, it is always followed by a *relation* and arrives at a *relation*. *Interest*, knowledge’s fuel, is *related* to *ergon*, thus, it is hungry for *manifold relations*. Knowledge, in short, knows nothing but *relations*, and thus, I theorized the *principle of metron*, whose metaphysical correlative, which is not subordinated to it, is *ergon* (plural: *erga*⁵⁴, or Plato’s Ideas).

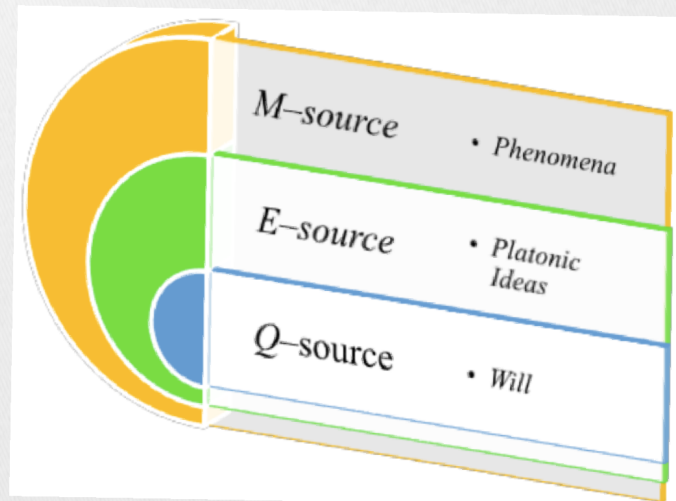
To summarize and illustrate, what has been said in §6, the reader can consider the phenomenal world as that whose

⁵²The direction of one’s goal is at which one’s eyes are fixed.

⁵³Based on this paper, *nothing is without a reason* has been mistakenly inverted to the said common error.

⁵⁴*Erga* are different (Platonic) *Ideas* of the Q. The difference between *Erga* and Plato’s Ideas will be discussed in future papers.

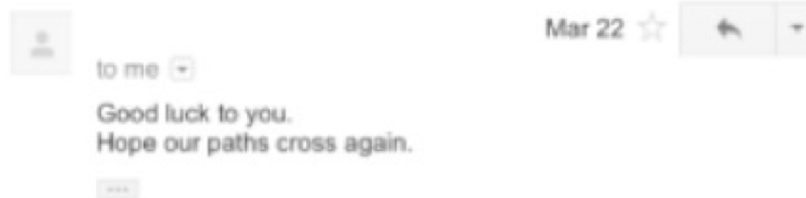
explanation is through the Principle of Metron (*M-source*), where the Possibility rules and time-space is the form of all forms, and multiplicity *appears* (εμφανίζειν). *E-source*, is like the forces and energies behind the phenomenal world; it resembles a well-composed music that transforms our soul to the world of *Ergon*. Contrary to phenomena, *E-source* is *independent* of the Principle of Metron. This source resembles Platonic Idea in Plato's allegory of the cave, out of which Metron's relations *disappear* (εξαφανίζειν). *M-sources* and *E-sources* liken to the electromagnetic waves; while one runs horizontally, the other oscillates vertically. When *M-sources* move violently like water droplets in the sky, *E-sources* prance quietly, like light, around the water droplets, resulting in rainbow. The unending characteristics of time-space continuum, which is the form of all phenomena, makes it an index to the impossibility of a finite measure exhausting an infinite (*Q*) source. It is the *Q-source*, which is the source of all sources. The inner resistance that provokes us not to merely take the external world (*M-source*) as the only truth is the so-called *Αγνώστος Θεός* or the unknown Greek god, which is what I have referred to it as *Q-source*.⁵⁵



⁵⁵See Appendix C for an example of this *Source Theory*.

Appendix A

A copy of the email (sent to me), in which the sender (a “professor” in a psychoanalysis program) could not hide his anger:



Appendix B

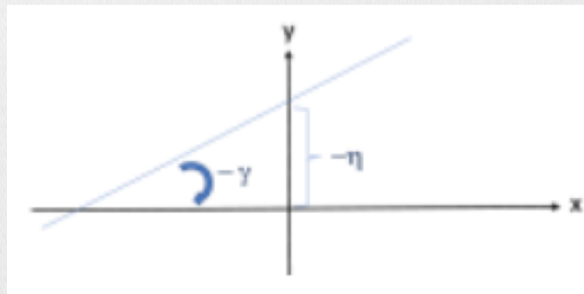
Let us assume we are given the following equation and are asked to find out about its real roots:

$$f(t) + a \cdot g(t) + b \cdot h(t) = 0 \quad (\text{I})$$

where f, g, h are polynomials in t .

I use the theory of (the principle of) *Metron* in two different ways to solve the problem.

A. *Intuition*, that is, by means of *perceptual* concepts of the simplest form of the curves (i.e., straight line).



1. Starting with a rectangular xy point-coordinates and with lines given by

$$y + \gamma x + \eta = 0$$

of which (γ, η) are the coordinates of line, (x, y) position of point, $-\eta$ the y -intercept, and $-\gamma$ tangent of the line with respect to x axis.

2. We interchange the coordinates of point and line:

$$\eta + x\gamma + y = 0$$

Note: I take the basic knowledge (described in 1 and 2) as given, with which the reader may be familiar. The knowledge acts as *ground*, on which the following statement 3 (acting as *reason*) stands (this procedure is what I call *intuitive Metron*, i.e., the principle of Metron of Being, and of Change).

3. Next, we identify the equation given in 2, with the initial equation I , where

$$\eta = \frac{f(t)}{h(t)} \quad \gamma = \frac{g(t)}{h(t)} \quad x = a \quad y = b$$

4. Now, if we take t as variable, then η & γ represent a family of straight lines, enveloping a curve (which is the *normal* curve of equation I).

Note: We, thus, represent equation I as *rational* curve – that is, as rational function of a parameter – in *line* coordinates. In mathematical notation, I interpret it as (*perceptual ground* \rightarrow *reason*) \equiv (*intuitive metron*)

Note¹: Values of t determine every tangent and its corresponding point.

Note²: a and b (the parameter-pair) determines a point in xy plane.

Note³: **Note¹** pass through **Note²**.

5. Q.E.D. **Note³** represents the real roots of equation I .

Note: The envelop of lines *metronized* the polynomial equation.

B. *Abstraction*, that is, through differential calculus.

Note: Here, instead of the preceding statement 3, and interpreting the equation I , I employ the *abstract* concept of *differential calculus*, by which *abstract Metron* (of differential calculus), i.e., the principle of Metron of Knowledge operates, and I attempt to solve the given problem.

3. We take $t^p + at^q + b = 0$ and represent it by envelop of lines $\Psi(t) = t^p + xt^q + y = 0$ where t is a parameter.
4. By differentiating with respect to t , we begin to eliminate t and find the *normal* curve in point-coordinates:
$$\Psi'(t) = pt^{p-1} + qxt^{q-1} = 0$$
5. Q.E.D. Intersection of lines (obtained by differentiation) with neighboring line (of t and $t + dt$) are the real roots of equation I .

Note: The locus of intersection, i.e., the envelop of lines *metronized* the polynomial equation.

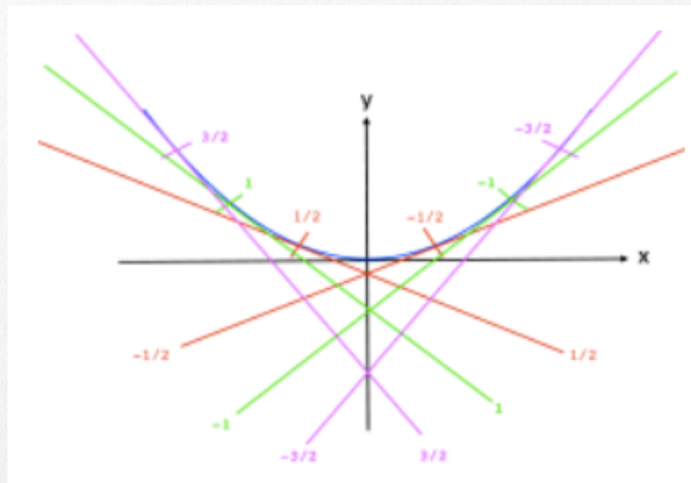
It follows from what has been said that the *abstract* concept (of differential) did not extend the knowledge of the initial polynomial curve. It, however, with precision shortened the calculation and is, thus, useful for various applications. In other words, the *abstract Metron* summarized the manifold relations (of SCP) into minimal *concepts* (of TCP).

Both methods A and B (from statement 3 onward), nevertheless, remained abstract, and perhaps, hard to *understand* them. But, by taking advantage of time-space union, discussed in this paper, I can use *time-relational* interpretation (i.e., apply numbers, formulas, and their laws and properties) and translate them into *space-relation*. That is, I go back from abstract concepts, which are only in *time* (hence, time-relation) to perceptual representations (hence, space-relation).

To illustrate the abstract procedure, and for the sake of simplicity, let's take the example of a *quadratic* equation

$t^2 + at + b = 0$, where its normal curve is the envelope of the straight lines $\eta = t^2$, $\gamma = t$ (this step represents time-relation).

From the point a, b we draw parameters t of the tangents, and we realize that the produced envelop (which is to be expected from the equation) is a *parabola*, with its vertex at the origin (this step represents space-relation, as shown in the figure).



As I have illustrated here, space-relation and time-relation have inverse relationship to each other. While time-relations are short and communicate a large amount of data, space-relations are vast, with laborious figures and calculations, and communicate some specific data. Space-relations are suited to SCP, while they withdraw quickly from TCP. Time-relations, on the other hand, enter easily into TCP, but give very little to SCP. Accordingly, one is drawn to geometry or algebra according to one's capacity of possessing SCP or TCP, respectively. At large, though, we all almost seek algebra the way our patience and memory work better toward application and communication.

Appendix C

For this part, I combine Einstein's consideration⁵⁶ of the phenomenon of formation of meanders in describing brooks and the "Baer's law" with my treatment of it by means of Metron for *gravity*, or space-occupation.

The common notion that brooks proceed in form of curve in "serpentine shapes" can be taken as the crust of the first layer of the *M*-source. As we move toward explaining this *phenomenon* by means of laws, forces, energies, and so on, we are dynamically going deeper toward the *E*-source. The followings steps are a few attempts to get closer to the *E*-source of this phenomenon.

My approach (as an addition to Einstein's view of the subject) can be summarized in form of an illustration. I first refer the reader to look at trees and bushes, and see how their green parts, especially at the edges, follow a *curve shape*, rather than straight lines upward. If you subtract all other objects, for the sake of simplicity, and consider only the tree (or the bush) and the Earth, you can find two objects exhibiting two space-occupations⁵⁷, and thus gravity appears. In this illustration, the plant grows according to the curvature of the space that the larger object has caused (i.e., the so-called "bending the space").

Now, we review Einstein's example of the tea leaves at the bottom of a tea cup that will gather in the center, as one stirs the tea. He explains this phenomenon as "the rotation of the liquid causes a centrifugal [moving-away-from-center] force to act on it. ...in the neighborhood of the walls of the cup the

⁵⁶His consideration was first published in the article *Die Naturwissenschaften* (Vol. 14, 1926), and its translation appeared in: A. Einstein, "Ideas and Opinions" (trans. Sonja Bargmann); Wings Books, NY:1954, pp. 249-253.

⁵⁷Time-occupation based on time-space union is needless to be mentioned in this experiment.

liquid is restrained by friction, so that the angular velocity with which it rotates is less there than to the other places nearer the center. In particular, the angular velocity of rotation, and therefore the centrifugal force, will be smaller near the bottom than higher up. The result of this will be a circular movement of liquid ... [and] tea leaves are swept into the center by the circular movement and act as proof of its existence.”

As one keeps in mind my explanation of time-space–occupation, and continues to read Einstein’s article, he or she is getting closer to the Platonic Idea or the *ergon* of the phenomenon of “the formation of meanders in describing brooks and the ‘Baer’s law’.” This *E*–source, i.e., the Ergon of the phenomenon, can be described by the language of *M*–source or Metron, that is to say, by means of a simple

division: $\frac{(space)}{(Time)}$.

To put it differently, all *E*–sources are Platonic Ideas and can be described (not in this paper) by a specific form of knowledge. *E*–sources adequately objectify the *Q*–source, which has been named *thing-in-itself* by Kant, and *Will* by Schopenhauer.⁵⁸

⁵⁸Certain caution must be taken when the resemblance on concepts with Plato, Kant, or Schopenhauer is mentioned throughout this paper. My considerations, on occasion, cannot be reconciled with those of these great minds, and I have my own criticism of them. These criticisms are not the subject of this paper, so they have not been inserted here.

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